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REMARKS

Claims 1 to 34 are pending in this application of which claims 1, 10, 18, 25 and 32 are the independent claims. Favorable reconsideration and further examination are respectfully requested.

Claims 3 to 5, 23 and 25 were rejected under 35 U.S.C §112, second paragraph for allegedly being indefinite because "processing contexts" lacked antecedent basis. Applicants respectfully disagree with respect to claim 3. Claim 3 does not contain the word "the" or "said" prior to the term "processing contexts" and therefore the term "processing contexts" in claim 3 provides antecedent basis for "the processing contexts" found in claim 4 (see MPEP 2173.05(e)). Notwithstanding, Applicants have amended claim 3 to include the term "a plurality of" prior to "processing contexts." Claim 23 was amended to depend on claim 22. Claim 25 does not contain the term "processing contexts" and therefore Applicants conclude that the §112 rejection of claim 25 is in error. Based on the foregoing amendments and remarks, Applicants respectfully request withdrawal of the §112 rejection.

Claims 1 to 6 and 8 to 34 were rejected under 35 U.S.C. § 103(a) as being obvious over Ohta et al. (U.S. Patent Application Publication Number 2002/0083317 hereinafter "Ohta") in view of Tardo et al. (U.S. Patent Number 7,082,534). Claim 7 was rejected under 35 U.S.C. § 103(a) as being obvious over Ohta in view of Tardo and in view of Corder et al. (U.S. Patent Number 7,069,447)

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Claim 1 is directed to a processor. The processor includes a crypto unit including a cipher core configured to cipher data received and authentication cores configured to authenticate the ciphered data. At least two authentication cores each implements a different authentication algorithm. The processor also includes an authentication buffer configured to store the ciphered data and provide the ciphered data to the authentication cores each in an amount based on the corresponding authentication algorithm implemented.

Applicants respectfully submit that the Examiner has omitted essential elements needed to establish a *prima facie* rejection, at least because Ohta does not contain all the claim elements recited in claim 1. In particular, the Examiner has failed to disclose where in the art Ohta discloses or suggests that the crypto unit includes a cipher core configured to cipher data.

The Examiner has indicated that in the rejection of claim 1 that Ohta teaches a cipher core as the Encryption and Authentication Processing Control Unit 301 in FIG. 12 (see page 2 of the Office Action dated 22 June 2006). However, Applicants respectfully submit that the control unit 301 is no more than a router/controller and does not cipher data. Ohta even discloses that the control unit 301 has a "function to control the data path connection switching unit 302" and "specifies the encryption processing unit 303a or 303b, the data block accumulation unit 304a or 304b and the authentication processing unit 305a or 305b that can perform the necessary processing" (see, paragraphs [0107] and [108] of Ohta). Therefore, the Examiner has not shown that Ohta discloses or suggests that the crypto unit includes a cipher core configured to cipher data.

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Independent claims 18, 25 and 32 include corresponding features to claim 1. Applicants submit that the Ohta reference should also be withdrawn with respect to claims 18, 25 and 32 for at least the same reasons as claim 1.

With respect to claim 18, the Examiner has not identified "a plurality of cipher cores" as recited in claim 18 (see pages 2 and 3 of the Office Action dated 22 June 2007). Therefore, Applicants respectfully submit that the Examiner has omitted essential elements needed to establish a *prima facie* rejection with respect to claim 18.

With respect to claim 32, the Examiner has not identified "cipher cores" as recited in claim 32 (see pages 2 and 3 of the Office Action dated 22 June 2007). Therefore, Applicants respectfully submit that the Examiner has omitted essential elements needed to establish a *prima facie* rejection with respect to claim 32.

Claim 10 is directed to a method of cryptographic data processing. The method includes storing ciphered data in blocks having a predetermined size, storing the data blocks in an authentication buffer and providing the ciphered data to authentication cores each in an amount based on a corresponding authentication algorithm implemented by an associated authentication core. At least two authentication cores each implements a different authentication algorithm.

Applicants respectfully submit that the Examiner has omitted essential elements needed to establish a *prima facie* rejection, at least because Ohta does not contain all the claim elements recited in claim 10. In particular, the Examiner has failed to disclose where in the art Ohta

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discloses or suggests ciphered data in blocks having a predetermined size (emphasis added, see pages 2 and 3 of the Office Action dated 22 June 2007).

Furthermore, Ohta does not disclose or suggest providing the ciphered data to authentication cores as recited in claim 10. Ohta disclose providing a ciphered data to a single authentication core. For example, Ohta describes that the control unit 301 "specifies ... the authentication processing unit 305a or 305b that can perform the necessary processing" (emphasis added, see paragraph [108] and FIG. 12 of Ohta). Ohta does not specify both authentication processing units but one authentication processing unit 305a or the other authentication processing unit 305b. Therefore, Ohta does not disclose or suggest providing the ciphered data to authentication cores.

Independent claims 20 and 25 include ca orresponding feature of providing the ciphered data to authentication cores as recited claim 10. Applicants submit that the Ohta reference should also be withdrawn with respect to claims 20 and 25 for at least the same reasons as claim 10.

For at least the foregoing reasons, Applicants request withdrawal of the art rejections.

Applicants submit that all dependent claims now depend on allowable independent claims.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above

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may not be exhaustive, there may be reasons for withdrawing the prior art cited with regards to any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Applicants submit that the entire application is now in condition for allowance. Such action is respectfully requested at the Examiner's earliest convenience.
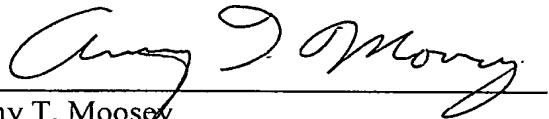
All correspondence should be directed to the address below. Applicants' attorney can be reached by telephone at (781) 401-9988 ext. 23.

No fee is believed to be due for this Response; however, if any fees are due, please apply such fees to Deposit Account No. 50-0845 referencing Attorney Docket: INTEL-013PUS.

Respectfully submitted,

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